

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN**

**MANIYA ALLEN, et al.,
Plaintiff,**

v.

Case No. 11-CV-0055

**AMERICAN CYANAMID et al.,
Defendants;**

**DIJONAE TRAMMEL,
Plaintiff,**

v.

Case No. 14-CV-1423

**AMERICAN CYANAMID et al.,
Defendants;**

DECISION AND ORDER

In the above-captioned cases, the plaintiffs claim that they were injured when, as young children, they ingested paint that contained white lead carbonate (“WLC”). Each plaintiff proceeds against three defendants: E.I. DuPont de Nemours and Company (“DuPont”), Atlantic Richfield Company (“ARCO”), and Sherwin-Williams Co. (“Sherwin-Williams”). Plaintiffs Latonya Cannon, Tyan McHenry, and D’Angelo Thompson additionally proceed against defendant Armstrong Containers, Inc. (“Armstrong”). The cases have been consolidated for trial. This decision and order will address several motions to exclude from trial the opinions and testimony of various expert witnesses.

I. *DAUBERT* STANDARD

Generally, relevant evidence is admissible at trial. Fed. R. Evid. 402. Rule 401 provides that “[e]vidence is relevant if (a) it has any tendency to make a fact more or less

probable than it would be without the evidence; and (b) the fact is of consequence in determining the action.” Fed. R. Evid. 401. Rule 403 further provides that I may exclude relevant evidence “if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence.” Fed. R. Evid. 403.

The admissibility of expert testimony is governed by Federal Rule of Evidence 702 and *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). See *Ervin v. Johnson & Johnson, Inc.*, 492 F.3d 901, 904 (7th Cir. 2007). Rule 702 provides that:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

The inquiry consists of three general areas: (1) the testimony must be “helpful,” which dovetails with the relevance requirements of Fed. R. Evid. 401–403; (2) the expert must be qualified by knowledge, skill, experience, training, or education; and (3) the testimony must be reliable and fit the facts of the case. *Lyman v. St. Jude Medical S.C., Inc.*, 580 F.Supp. 2d 719, 722 (E.D. Wis. 2008).

Under the third part of the analysis, I examine whether (1) the testimony is based upon sufficient facts or data; (2) the testimony is the product of reliable principles and methods; and (3) the witness has applied the principles and methods reliably to the facts of the case. Fed. R. Evid. 702. I am to act “as a ‘gatekeeper’ for expert testimony, only admitting such testimony after receiving satisfactory evidence of its reliability.” *Dhillon v.*

Crown Controls Corp., 269 F.3d 865, 869 (7th Cir. 2001). It is not my role to determine whether an expert's opinion is correct; I consider only "whether expert testimony is pertinent to an issue in the case and whether the methodology underlying that testimony is sound." *Schultz v. Akzo Noble Paints, LLC*, 721 F.3d 426, 431 (7th Cir. 2013), citing *Smith v. Ford Motor Co.*, 215 F.3d 713, 719 (7th Cir. 2000).

The proponent of the expert bears the burden of demonstrating that the expert's testimony would satisfy the Daubert standard. *Lewis v. CITGO Petroleum Corp.*, 561 F.3d 698, 805 (7th Cir. 2009); Fed. R. Evid. 702 advisory committee's note (2000 Amends.) ([T]he admissibility of all expert testimony is governed by the principles of Rule 104(a). Under that Rule, the proponent has the burden of establishing that the pertinent admissibility requirements are met by a preponderance of the evidence.").

II. DAUBERT AND THE CAUSATION STANDARD

One of the expert opinions now at issue addresses causation. Plaintiffs bring their claims under the negligence and strict products liability frameworks articulated by the Wisconsin Supreme Court in *Thomas ex rel. Gramling v. Mallet*, 2005 WI 129. The negligence framework requires each plaintiff to show that he or she ingested WLC, and that the WLC caused his or her injuries. *Id.* at ¶ 161. The strict liability framework requires each plaintiff to show that a defect in the WLC was a cause of his or her injuries. *Id.* at ¶ 162. Under Wisconsin law, negligence or defect "caused" an injury if it was a substantial factor in producing the injury. WIS JI-CIVIL 1500 Cause; *Schultz*, 721 F.3d at 433. As is true in many toxic tort cases, the injuries claimed by the plaintiffs here are possibly—indeed likely—the product of several combined factors. However, to show that WLC was a "cause" or "substantial factor," plaintiffs here are not required to demonstrate that lead

exposure was a *sole* cause of each of their injuries, so long as each shows that the WLC contributed substantially to the development of their injuries or increased the risk of such injuries. See *Schultz*, 721 F.3d at 433.

A “differential etiology” is one accepted and valid method by which experts may render an opinion about the cause of a patient’s injury. *Myers v. Illinois Central R. Co.*, 629 F.3d 639, 644 (7th Cir. 2010).

[I]n a differential etiology, the doctor rules in all the potential causes of a patient’s ailment and then by systematically ruling out causes that would not apply to the patient, the physician arrives at what is the likely cause of the ailment. ... The question of whether [a differential etiology] is reliable under *Daubert* is made on a case-by-case basis focused on which potential causes should be “ruled in” and which should be “ruled out.”

Id. (internal citations omitted). In assessing whether an expert employed a reliable method, I have discretion to consider “whether the expert has adequately accounted for obvious alternative explanations.” Fed. R. Evid. 702 (2000) Committee Note. In some cases, this analysis may require me to consider whether the expert has adequately “show[n] why a particular alternative explanation is not, in the expert’s view, the *sole* cause of the [injury].” *Schultz*, 721 F.3d at 434 (citing *Haller v. Shaw Indus., Inc.*, 167 F.3d 146, 156 (3d Cir. 1999)). This makes sense in cases where it is obvious that an alternative factor may have been solely responsible for the injury, such that the causal factor alleged by the plaintiff could have played no role. Similarly, in cases where obvious alternative causes may have *contributed* to an injury, even though they may not entirely exclude the causal factor favored by the plaintiff, an expert may be excluded as unreliable if he entirely fails to consider or investigate those alternatives. See *Myers*, 629 F.3d at 645; *Brown v. Burlington Northern Santa Fe Ry. Co.*, 765 F.3d 765, 773-774 (7th Cir. 2014).

But not all cases entail such stark alternative causal factors. It is the more general rule that, while a reliable expert must *consider* reasonable alternative causes of an injury, an expert need not rule out every alternative cause of an injury. *Id.*; *Cf. Grayton v. McCoy*, 593 F.3d 610, 619 (7th Cir. 2010) (District court that excluded expert on grounds that he did not posit possible alternative causes of plaintiff's injuries "fail[ed] to account for the inefficiencies of requiring an expert to list each and every possible cause of a given outcome."). "An expert need not testify with complete certainty about the cause of an injury, rather he may testify that one factor could have been a contributing factor to a given outcome." *Gayton*, 593 F.3d at 619. The possibility (and the degree to which) other factors may have contributed to plaintiffs' injuries is a subject susceptible to exploration on cross-examination by opposing counsel. *Id.*; *see also Cooper v. Carl A. Nelson & Co.*, 211 F.3d 1008, 1021 (7th Cir. 2000). Thus, in cases that entail many likely-overlapping causal factors, I assess the reliability of an expert's differential etiology by determining whether the expert adequately identified the range of potential causes, and whether the expert adequately investigated and considered each of these causes in reaching his or her conclusions. *See Schultz*, 721 F.3d at 433. Such an approach is entirely consistent with Wisconsin tort law's "substantial factor" causation standard. *Id.*

Finally, the standard for reliability may be somewhat different when one party's expert seeks to challenge the opposing party's expert's differential etiology. "In attacking the differential diagnosis performed by the plaintiff's expert, the defendant may point to a plausible cause of the plaintiff's illness other than the defendant's action. It then becomes necessary for the plaintiff's expert to offer a good explanation as to why his or her conclusion remains reliable." *Kannankeril v. Terminix Intern., Inc.*, 128 F.3d 802, 808 (3d

Cir. 1997); *see also Westberry v. Gislaved Gummi A.B., Inc.*, 178 F.3d 257, 265-66 (4th Cir. 1999). Further, under *Thomas*, plaintiffs have the burden of proof on causation, while defendants can rebut plaintiffs' theory of causation by presenting alternative causes. 2005 WI 129, ¶ 156; *see also id.*, ¶ 162 ("[T]he pigment manufacturers here may have ample grounds to attack and eviscerate [plaintiff's] prima facie case, with some of those grounds including that lead poisoning could stem from any number of substances (since lead itself is ubiquitous) and that it is difficult to know whether [plaintiff's] injuries stem from lead poisoning as they are not signature injuries."). As the court in *Daubert* stated, "[V]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." 509 U.S. at 595. Thus, in the present cases, a defendant's expert who opines that a factor other than WLC exposure may have caused part or all of a plaintiff's alleged injury will generally be admissible even if that expert did not expressly consider or exclude lead as a cause, provided that the expert used an otherwise reliable methodology to arrive at the opinion that the alternative factor may have been a case.

III. ANALYSIS

A. Vanessa Elliot Bell

Vanessa Elliot Bell is a psychiatrist retained by defendants. She opines that plaintiffs do not have psychological disorders or deficiencies that can be attributed to ingestion of lead during childhood. She opines that other factors like genetics, family history, environment and socioeconomic factors can account for plaintiffs' current behavioral, social and emotional functioning. As a trained clinical psychologist of more

than twenty years' experience, she is amply qualified to conduct a psychological examination and to opine on a person's psychological state and the factors affecting it.

Plaintiffs argue that Dr. Bell's causation opinions are flawed because she did not rule out lead as a causal factor in plaintiffs' injuries. However, the reliability of Dr. Bell's opinion does not rely on her ruling out lead. As described in Section II above, Dr. Bell's testimony appropriately challenges the testimony of plaintiffs' causation experts by raising possible alternative causes. She appropriately relies on scholarly literature in forming her opinions. Plaintiffs' objections to her choices and interpretation of the scholarly literature must be addressed through cross-examination and the testimony of plaintiffs' experts.

Plaintiffs also seek to exclude certain opinions which they claim Dr. Bell disavowed during her deposition. Specifically, plaintiffs claim that Dr. Bell testified that she would not offer opinions on the specific effect of lead on the IQ of the plaintiffs or opinions that any risk factor actually caused a particular adverse outcome in any plaintiff. This testimony is not a disavowal of Dr. Bell's offered opinions. Dr. Bell intends to opine that each plaintiff "has no injury that can be attributed to lead" because "it would be clinically impossible to pinpoint exposure to lead as a substantial contributing factor to an alleged loss of IQ or to any neuropsychological deficits" because "[m]any factors combine to influence the developmental trajectory of an individual's outcome." ECF no. 842 Ex. C 18; ECF no 842, Ex. D 16; ECF no. 842 Ex. E 14-15; ECF no. 842. Ex. F 11-12. Dr. Bell's testimony that she does not intend to opine on the specific effect lead or other factors had on the plaintiffs' IQ or adverse conditions is consistent with these opinions. Accordingly, this motion is denied.

B. John C.P. Goldberg

John C.P. Goldberg, a deputy dean and law professor at Harvard Law School, has been retained by Sherwin-Williams to offer expert testimony in this case. Professor Goldberg has reviewed federal and state statutes and caselaw for the years 1880 to 1970 and proffers the opinion that none of the laws regulating the sale of WLC during this time period required the manufacturers of lead pigments or paints to provide “warnings of harms associated with children’s exposure to lead through deteriorating paint.” ECF no. 753 Ex. A 6. Specifically, he considers drug labeling laws, paint labeling laws, industrial safety laws, laws requiring lead-poisoning warning labels on interior paints, and common law liability for failure-to-warn. He additionally opines that

[A] manufacturer or seller of lead pigments or lead paints who was fully informed of applicable legislation, regulations, and court decisions issued by federal and state authorities in the period from 1880 to 1970 would have been reasonable to conclude that it was under no legal requirement to issue warnings stating that lead paint is a deadly cumulative poison, or identifying the risk of lead poisoning posed to children by peeling paint in dilapidated housing.

Id. at 5.

Plaintiffs argue that Professor Goldberg’s opinions are inadmissible because they consist entirely of legal conclusions that, if accepted by the jury, could determine the outcome of the case. Because Professor Goldberg intends to testify about legal issues on which I will instruct the jury, they argue, he oversteps the role of expert witness. Plaintiffs also argue that Professor Goldberg’s opinions are legally interpretative testimony and that under Seventh Circuit precedent expert witnesses are not permitted to interpret the meanings of statutes, regulations, and contract terms.

Additionally, plaintiffs argue that Professor Goldberg’s opinion is not relevant to their failure-to-warn claims. Specifically, they argue that because their failure-to-warn claims sound in strict liability, and because under the relevant law the inquiry into whether

an obligation to warn existed and went unmet is tightly focused on the manufacturers' and the consumer's relative knowledge, the legal duties of the manufacturers as they would have been interpreted at the time are irrelevant. Plaintiffs do not dispute Professor Goldberg's qualifications or methodology.

Sherwin-Williams argues that Professor Goldberg's opinions are necessary to rebut the claims of Plaintiffs' expert historians, who, according to Sherwin-Williams, will testify that it had a duty to warn based on foreign laws at the time. The lack of similar laws in the United States, it argues, not only will rebut Plaintiffs' historians but provide helpful historical context and information to the jury regarding consumer expectations. Sherwin-Williams also argues that, while not dispositive, evidence of historical legal requirements to warn of WLC's toxicity are relevant to determining consumer expectations at the time. Specifically, the jury could infer that lawmakers' decisions not to require warnings would lead a manufacturer to conclude that its product was not dangerous to an extent beyond that which would be contemplated by the ordinary consumer.

Plaintiffs are correct that, "[a]s a general rule, an expert may not offer legal opinions." *Valencia v. City of Springfield, Illinois*, 2020 WL 1847679 (C.D.Ill. Apr. 13, 2020) (citing *Jimenez v. City of Chicago*, 732 F.3d 710, 721 (7th Cir. 2013)). "Expert testimony as to legal conclusions that will determine the outcome of the case is inadmissible." *Good Shepherd Manor Found., Inc. v. City of Moline*, 323 F.3d 557, 564 (7th Cir. 2003) (citing *United States v. Sinclair*, 74 F.3d 753, 757 n.1 (7th Cir. 1996)). Similarly, the meaning of statutes and regulations is "a subject for the court, not for testimonial experts. The only legal expert in a federal courtroom is the judge." *United States v. Caputo*, 517 F.3d 935, 942 (7th Cir. 2008); see also *United States v. Stewart*,

433 F.3d 273, 311 (2d Cir. 2006) (“Clearly, an opinion that purports to explain the law to the jury trespasses on the trial judge’s exclusive territory.”) Put another way, “an expert usually cannot testify about how a law should be interpreted or what it means.” *Sec. & Exch. Comm’n v. Ferrone*, 163 F. Supp. 3d 549, 563 (N.D. Ill. 2016) This is the case regardless of whether the interpreted statutes are at the heart of the case. See *U.S. v. Lupton*, 620 F.3d 790, 800 (7th Cir. 2010) (holding legal interpretations that were “tangential to the crucial questions the factfinder had to answer” were barred).

This principle, that testimony by legal experts is not appropriate, is important not only because the expert may usurp the duties of the judge, but also because such testimony “allow[s] the jury to infer that it [can] look to that witness for legal guidance” which “impermissibly tilt[s] the power between the parties” *Harbor Ins. Co. v. Continental Bank Corp.*, 822 F.2d 357, 366 (7th Cir. 1990). The fact that a witness testifies as a legal expert, “may cause the jury to accord too much weight to that testimony, and may infer that the jury should look to that witness for legal guidance.” *Naeem v. McKesson Drug Co.*, 444 F.3d 593, 610 (7th Cir. 2006).

The opinions offered by Professor Goldberg are undoubtably legal interpretations. Professor Goldberg does not present himself as anything other than a legal expert. However, the laws Professor Goldberg seeks to interpret are, essentially, historical; the period of time he examines ended fifty years ago. This fact alleviates many of the concerns inherent in expert legal testimony. Because none of the laws are applicable to these cases, and many, if not all, are no longer in effect, Professor Goldberg is likely not in danger of usurping the role of the judge or jury. In this way, testimony regarding historical law is more similar to a question of fact than legal interpretation. His testimony

is nonetheless legal interpretation by a legal expert and, especially given Professor Goldberg's position and credentials, may unduly influence the jury. In particular, I am concerned with Professor Goldberg's opinion that a manufacturer or seller of WLC "would have been reasonable to conclude that it was under no legal requirement to issue warnings" about the dangers of lead. Although the legal duties under the laws examined by Professor Goldberg are not an ultimate issue in the case, the jury will be asked to determine whether the defendants exercised the care which a reasonable company would use in similar circumstances. Testimony from a legal expert about what a company could reasonably conclude about its legal duties presents a serious risk of misleading the jury, especially given the likelihood of a jury placing undue weight on a legal expert. *See Paine ex rel. Eilman v. Johnson*, 2010 WL 785384, at *3 (N.D. Ill. Feb. 26, 2010) ("Any opinion that Defendants acted reasonably, or any opinion that is likely to be understood to that effect, is a legal conclusion as to Defendants' liability . . . and is therefore barred.")

Separately, the opinion regarding what a reasonable company would conclude about its legal duties is not relevant to any issue in this case. As the plaintiffs correctly point out, their failure-to-warn claim does not rest on either the historical legal duties of the defendants or on a company's reasonable conclusions regarding those duties. Nor is their negligence claim related to what defendants may have concluded about historical labelling requirements and tort laws. In addition to the substantial risk of misleading the jury, whether a company could have reasonably concluded it was not legally required to warn of a danger is not probative of whether a reasonable person would recognize the company's actions as creating an unreasonable risk. Accordingly, Professor Goldberg

may not testify about what a manufacturer or seller of WLC could reasonably conclude were its legal duties.

That leaves Professor Goldberg's opinions regarding the existence, or lack thereof, of laws requiring warning labels on WLC products. Sherwin-Williams argues these opinions will rebut plaintiffs' expert historians, who will testify that certain foreign laws required such labels. However, plaintiffs' experts will be offering testimony of foreign label requirements to support the inference that defendants knew or should have known the dangers that lead presented. The fact that the United States considered and declined to implement similar laws does nothing to rebut the inference or support an inference that information about the dangers of lead was unavailable.

Sherwin-Williams also argues that a jury could infer from lawmakers' decisions not to require warnings that WLC was not dangerous to an extent beyond that which would be contemplated by the ordinary consumer. I agree that a jury could make such an inference and that opinions regarding legal schemes during the times at issue could be relevant. However, I find that the probative value of such testimony is outweighed by the potential for prejudice inherent in allowing a legal expert to testify that the defendants' conduct did not violate contemporary labeling laws. As I discussed above, allowing testimony from a legal expert runs the risk of impermissibly tilting the balance of powers between the parties and misleading the jury into believing they are to look to the expert for legal guidance. The probative value of this evidence is also limited. There are likely other ways of presenting this evidence at trial, including during the cross examination of plaintiffs' expert historians who plan to testify on the testimony of legal schemes and regulations regarding lead paint. Accordingly, I find this testimony is barred by Rule 403.

For the reasons discussed above, I will grant the motion to exclude Professor Goldberg's testimony.

C. Douglas Lamb

Douglas Lamb is an expert chemist retained by DuPont. He proffers the opinion that the paint chips found in the homes of the plaintiffs did not match any of the known formulas of DuPont paints during the relevant times. Plaintiffs adopt the arguments made by the plaintiffs in the *Burton* trial and, in doing so, move to exclude Dr. Lamb's opinions from evidence on grounds of both relevance and reliability.

As to relevance, plaintiffs argue that the chemical analysis of WLC or paint found in plaintiffs' homes bears neither upon plaintiffs' prima facie negligence and strict liability claims nor upon the exculpatory defenses of time and geographic market identified in *Thomas*. Plaintiffs argue that the Wisconsin Supreme Court's explicit recognition of the time and geographic market defenses implies a rejection of other possible exculpatory defenses, including on based on chemical analysis of the paint in plaintiffs' homes. Plaintiffs also argue that the Seventh Circuit's discussion of risk contribution in *Gibson* limits the available exculpatory defenses to just time and geography. *Gibson v. American Cyanamid Co.*, 760 F.3d 600, 614 (7th Cir. 2014).

However, as I explained in the *Burton* case, I do not read *Thomas* or *Gibson's* explicit acknowledgement of the time and geographic market defenses as necessarily implying that other exculpatory defenses are unavailable. See *Burton v. American Cyanamid*, 341 F.Supp.3d. 933, 938-939 (E.D. Wis. 2018). Rather, for the reasons I explained in *Burton*, I find that Dr. Lamb's opinion testimony regarding the chemical

analysis of the paint in plaintiffs' homes is relevant to an exculpatory defense that is available to DuPont. *Id.*

Plaintiffs also take issue with the limitations that Dr. Lamb imposed in choosing the formulas he reviewed. Plaintiffs note that: (1) the formulas excluded all white lead-in-oil manufactured by DuPont on grounds that DuPont's white lead-in-oil allegedly was not available for sale in Milwaukee between 1917 and 1924; (2) the formulas reviewed by Dr. Lamb exclude white lead-in-oil which may have been manufactured by DuPont between 1925 and at least 1945 pursuant to a contract with National Lead; (3) the formulas excluded white lead-in-oil which may have been manufactured by DuPont after 1925; and 4) the formulas excluded paint which may have been manufactured by other paint manufacturers using DuPont's WLC. Concerns such as these may implicate the reliability of Dr. Lamb's conclusions, but they do not undermine the validity of his methodology. "The factual underpinnings of the expert's analysis and the correctness of the expert's conclusions based on that analysis are factual matters to be determined by the trier of fact." *Manpower Inc.*, 732 at 806. Concerns about the selection of formulas go to the weight of Dr. Lamb's testimony and are for the jury.

Finally, plaintiffs object to Dr. Lamb's reliance on data generated through energy dispersive X-ray spectography (EDS), noting in particular that the EDS scans of certain layers of paint in the *Burton* case were redone and that reanalysis yielded different results. As I explained in *Burton*, EDS is a mature technique widely used by scientists to analyze the elemental composition of paints and pigments, and the results of the second analysis were within the statistical margin of error for the first results. *Burton v. American Cyanamid*, 341 F.Supp.3d 933, 940 (E.D. Wis. 2018). To the extent that plaintiffs have

concerns regarding the quality of the EDS data that Dr. Lamb relied on, those questions go to the weight of his testimony, not its credibility. See *Stollings v. Ryobi Technologies, Inc.*, 725 F.3d 753, 767 (7th Cir. 2013). Accordingly, I will deny this motion.

DuPont argues that by adopting the *Burton* plaintiffs' arguments, the current plaintiffs waive any claims based on the paints DuPont sold after 1924, when it stopped manufacturing WLC. Its argument is based on two sentences in the original motion which state, "DuPont has been sued as a WLC pigment manufacturer," and "DuPont has not been sued as a paint manufacturer." *Burton* ECF. 567 at 203. By intentionally adopting the same arguments here, it is argued, plaintiffs have expressly waived claims based on DuPont's manufacture of paint.

Plaintiffs in the current case are not pursuing claims based on the manufacture of paint; they are pursuing claims based on the manufacturing and *marketing* of WLC, including by incorporating WLC into paint products and selling those products. To the extent DuPont is arguing that plaintiffs have waived their claim for the marketing of WLC incorporated into paint products, I disagree. Waiver is the "intentional relinquishment or abandonment of a known right." *Hamer v. Neighborhood Housing Services of Chicago*, 138 S.Ct. 13, 17 n. 1 (2017) (quoting *United States v. Olano*, 507 U.S. 725, 733 (1993)). It is clear that plaintiffs did not intend to waive their claim based on marketing liability by adopting the arguments used by the *Burton* plaintiffs. Further, because this claim has been at issue throughout this entire case, DuPont is not prejudiced.

D. Matthew Perricone

Matthew Perricone is a chemist retained by Sherwin-Williams. He offers testimony that the chemical composition of the lead-containing paint layers in samples taken from

the plaintiffs' homes are inconsistent with any formulations of Sherwin-Williams WLC paints, either because a component is present in the paint layer that is not present in a Sherwin-Williams formulation or because the ratio of elements is inconsistent between the paint layer and any Sherwin-Williams formulation. Dr. Perricone relied on two sets of data in forming his opinions: a database of known Sherwin-Williams residential paint formulas, and the elemental compositions of each layer of paint in the samples collected from plaintiffs' residences as determined by DuPont's expert Christopher Palenik using EDS. Dr. Perricone used a two-step process to compare the elemental compositions of the formulas to those of the paint chips. First, he used a computer program to screen for elemental consistency by comparing the presence or absence of 14 individual elements within the paint formulations to the presence or absence of the same elements in each of the paint layers as reported in the EDS data. Then, for the layers that displayed elemental consistency, Perricone compared the ratio of elements reported in the paint layer to the ratio of elements in the various formulations, eliminating the layers with a significant disparity between the ratios.

Plaintiffs do not challenge Dr. Perricone's comparative methodology; rather, they challenge the completeness and accuracy of the two data sets upon which he relies. Such questions go to the weight of Perricone's testimony and not its admissibility. *See Stollings*, 725 at 767. Accordingly, I will deny this motion.

E. Kenneth Brown

Kenneth Brown is a chemist retained by Armstrong. He offers testimony on whether the layers of paint in the samples taken from the plaintiffs' homes match published formulas of paint sold by Armstrong or its predecessors. He formed his opinions

by comparing the ratios of various elements in the published formulas to the ratio of the same elements in the various paint layers as identified by EDS analysis. Plaintiffs essentially object to Dr. Brown's reliance on the published formulas, arguing that Brown cannot know whether these are accurate representations of the actual formulas, especially given that they might have changed over time. Plaintiffs arguments go to the weight rather than the admissibility of Brown's testimony and are not grounds for exclusion. See *Id.* Accordingly, this motion is denied.

F. Joseph Swider

Joseph Swider is a nuclear chemist who has been retained by the plaintiffs. DuPont moves to exclude some of his opinions and is joined by Armstrong and Sherwin-Williams. Sherwin-Williams also moves for leave to file a reply brief in support of their joinder, which I will grant for good cause. For the same reason, I will deny plaintiffs' motion to strike Sherwin-Williams' motion for leave to file a reply.

DuPont seeks to exclude Dr. Swider's rebuttal reports critiquing Drs. Palenik, Lamb, Brown, and Perricone's expert reports on the basis that Dr. Swider's opinions are unhelpful and are based on speculation rather than a reliable methodology. DuPont and Armstrong argue that Dr. Swider's rebuttal opinions are unhelpful because they do not "fit the facts" of the case. Dr. Swider's rebuttal opinions consist of several possible reasons the conclusions of the defense experts may be inaccurate. For instance, Dr. Swider explains that the EDS analysis used by the defendants' experts examines only a small amount of the paint at issue and, because paint is heterogenous and applied unevenly, the examined area may not be chemically representative of the paint used. During his deposition, Dr. Swider conceded that EDS becomes more accurate when several spectra

are taken over different areas and added together. DuPont argues that because Dr. Palenik used such a method, and examined multiple points that were “stitched together,” Dr. Swider’s opinion that EDS may be inaccurate no longer “fits” since it was based on a faulty assumption. However, the fact that Dr. Palenik’s technique may be more accurate than other EDS techniques does not undermine Dr. Swider’s critique of the method: that it fails to directly measure the elemental makeup of the entirety of the paint layer and is therefore subject to inaccuracies caused by the heterogeneity of paint, uneven distribution, and other factors. That Dr. Palenik took steps to prevent these inaccuracies goes to the weight of Dr. Swider’s testimony, not the fit or the helpfulness to the jury.¹ In its motion, Sherwin-Williams argues that Dr. Swider’s critique of Dr. Perricone’s reliance on EDS is not helpful to the jury because Dr. Swider conceded that EDS can be accurate. This argument fails for the same reason.

DuPont and Armstrong also argue that Dr. Swider’s opinions are based on mere speculation because the only basis for his rebuttal opinions is his purported expertise. Similarly, in its motion for joinder, Sherwin-Williams argues that Dr. Swider’s critiques are based on speculation and are not supported by facts. I disagree. Dr. Swider’s rebuttal reports are directed entirely at the credibility of the defendants’ experts’ conclusions. Essentially, his opinions are giving the jury reasons to perhaps be skeptical of those experts’ results. Thus, the underlying facts and data on which his opinions rest are those

¹ To the extent DuPont is arguing that because Dr. Swider stated in his deposition that EDS could be made more accurate by examining multiple points, and because Dr. Palenik did examine multiple points, that Dr. Swider failed to examine Dr. Palenik’s methods in forming the opinions in his rebuttal report, I disagree. The deposition transcript indicates that Dr. Swider was addressing the discussion section of his initial report, rather than any portion of his rebuttal reports, when he offered examples of how EDS accuracy could be improved.

in the other experts' reports, and his methodology is to read those reports through the lens of his own accumulated expertise, identifying areas where uncertainty might creep in. Given Dr. Swider's extensive experience with Scanning Electron Microscopy, EDS, and paint analysis, and because his opinions are primarily explanatory, this method is sufficiently reliable. Accordingly, I will deny DuPont and Armstrong's motions.

Sherwin-Williams also argues that Dr. Swider's opinion regarding the computer program used by its expert Dr. Perricone should be excluded because Dr. Swider is not an expert in software and because Dr. Swider did not attempt to replicate Dr. Perricone's results. Sherwin-Williams argues that because Dr. Swider did not examine the software at issue, he cannot be qualified as an expert, citing *Autotech Tech. L.P. v. Automationdirect.com*. 471 F.3d 745, 749 (7th Cir. 2006) ("To qualify as an expert on software, an expert should, at a minimum, examine the product and software upon which the expert bases his opinion.")

Autotech concerned a proposed software development expert who would have testified that a specific program could not have been developed without the use of proprietary information. See *Id.* That proposed expert relied on his 26 years of experience in software development and advertisements for the relevant software rather than the software itself, and the court ruled that this was insufficient to form an opinion on whether the program could have been developed without proprietary information. *Id.* Here, Dr. Swider is not opining on how the software was developed, but on whether Dr. Perricone's paint chip analysis is reliable. Dr. Swider is qualified to opine on this topic. That Dr. Swider did not attempt to replicate Dr. Perricone's results is not relevant. Replicability could be a relevant factor in whether Dr. Perricone's expert testimony is admissible, but that is not

the critique Dr. Swider is making. Rather, Dr. Swider points out that the program was never validated with known data to ensure it was accurate; replicating Dr. Perricone's results with the same samples used would not undermine this criticism. Dr. Swider's opinion is that of a qualified expert and is based on sufficient data and reliable methods as explained above and is helpful to the jury. He is not required to attempt to replicate Dr. Perricone's analysis for his opinion to be admissible.

G. Douglas Johnson-Green

Douglas Johnson-Green is a neuropsychologist and an expert witness for the defendants. Plaintiffs seek to exclude opinions offered by Dr. Johnson-Green on two topics: (1) the state of medical and scientific knowledge about the effects of lead on children and whether neuropsychological methods can ever support a finding that impairments are attributable to lead; and (2) whether early childhood lead exposure contributed to the neuropsychological status of any plaintiffs. Plaintiffs argue that Dr. Johnson-Green lacks the specialized knowledge about lead to render his opinions admissible under Rule 702 and that the methodology underlying his causation methodology is nothing more than *ipse dixit*.

Dr. Johnson-Green personally examined each plaintiff and applied established neuropsychological methods to determine whether any of the plaintiffs experienced neuropsychological impairments which could be attributed to lead exposure. As a neuropsychologist, Dr. Johnson-Green is qualified to offer opinions on this issue. In the cases of plaintiffs Cannon and Thompson, however, Dr. Johnson-Green concluded that his test results were inconclusive and was unable to determine whether plaintiffs Cannon and Thompson suffered from neuropsychological impairments. Because he did not have

sufficient data on which to base an opinion, Dr. Johnson-Green may not offer an opinion regarding the neuropsychological impairments of plaintiffs Cannon and Thompson.

In the cases of plaintiffs McHenry and Trammel, Dr. Johnson-Green concluded that they suffered from no clinically significant cognitive impairments, nor any emotional or behavioral disorders. Plaintiffs argue that because Dr. Johnson-Green found no evidence of neuropsychological impairments, and because he was unwilling to answer hypothetical questions at deposition, his opinions are irrelevant to the issue of causation. These opinions are certainly relevant to the issue of injury, however, and therefore admissible. That Dr. Johnson-Green was unwilling to answer hypothetical questions does not undermine the validity of his methods.

That leaves the issue of whether Dr. Johnson-Green may testify generally about whether neuropsychological evaluations can ever support a finding that neuropsychological impairments can be attributed to lead exposure. Dr. Johnson-Green opines that they cannot due to the lack of a signature injuries, the fact that similar exposures can result in different symptoms of different severities, and the fact that it is impossible to separate out the influence of other factors. Plaintiffs argue that Dr. Johnson-Green's methodology is flawed and amounts to *ipse dixit* because it necessarily results in the conclusion that any given individual's neuropsychological impairments cannot be attributed to lead poisoning. Plaintiffs arguments are actually an attack on Dr. Johnson-Green's conclusions rather than his methodology; in evaluating the purpose and capabilities of neuropsychological evaluation and the relevant literature on lead poisoning, Dr. Johnson-Green has concluded that neuropsychological evaluation cannot determine whether lead is a cause of neuropsychological impairments. In reaching this

conclusion, Dr. Johnson-Green has relied on his experience as a neuropsychologist, the methods and nature of neuropsychological evaluation, and the current scientific literature on lead. Rather than relying on *ipse dixit*, Dr. Johnson-Green points out several specific factors that lead him to this conclusion, including the limitations of epidemiological research and the lack of a signature injury. Plaintiffs may take issue with this conclusion, but that is properly addressed in cross-examination.

Plaintiffs also argue that Dr. Johnson-Green's opinion regarding the validity of neuropsychological evaluation in determining whether impairments were caused by exposure to lead is not reliable because its methodology misunderstands the legal standard, namely that plaintiffs need only prove that lead was a substantial factor in producing the injury, not that it was the sole cause. *See Schultz v. Akzo Nobel Paints, LLC*, 721 F.3d 433 (7th Cir. 2013). I am not convinced that Dr. Johnson-Green's methodology ignores this fact. Rather, I read his opinion as stating that neuropsychological evaluation is insufficient to "rule in" lead as a cause. Regardless, there is no requirement that his opinions and methods are precisely congruent with legal questions and standards. The identified opinion is based on reliable methodology and is relevant as a rebuttal of Dr. Trope's conclusions to the contrary. Accordingly, I will grant in part and deny in part the motion, as discussed above.

H. Mark D'Esposito

Mark D'Esposito is a medical doctor and researcher who is retained as an expert witness by the defendants. Plaintiffs seek to exclude three opinions offered by Dr. D'Esposito that they characterize as follows: (1) that none of the Plaintiffs have any brain injury; (2) that any effect from the Plaintiffs' ingestion of lead as toddlers has been

mitigated or negated by brain plasticity; and (3) that children are more resilient to the effects of lead ingestion than are adults. Plaintiffs argue that Dr. D'Esposito's first identified opinion is unreliable because he failed to adhere to the standards of intellectual rigor that are demanded in his professional work because he did not conduct a brain scan of the plaintiffs. They also argue that the second and third identified opinions are unreliable because Dr. D'Esposito has no background involving the specific effects of lead on the brain and because his opinions are unsupported by any research conducted by Dr. D'Esposito or published by others.

The first question is whether Dr. D'Esposito actually intends to offer the three opinions as they are characterized by the Plaintiffs. Defendants argue that, rather than opining that none of the plaintiffs have suffered brain injuries, Dr. D'Esposito is offering the opinion that the neuropsychological evaluations conducted by other experts are insufficient to conclude medically that any of the plaintiffs have suffered brain injuries. In other words, rather than offering a diagnosis of his own, Dr. D'Esposito is reviewing the analysis of others and explaining why he believes it cannot support a diagnosis of brain injury. After reviewing Dr. D'Esposito's report, I agree with defendants about the nature of his testimony. Given Dr. D'Esposito's education and experience, he is qualified to conduct such analysis, and since he is not offering a diagnosis there is no reason to expect him to conduct a brain scan as he would when diagnosing patients in his professional work. His opinions are also based on sufficient data and reliable methods; the underlying facts and data on which his opinions rest are those in the other experts' reports, and his methodology is to read those reports through the lens of his own accumulated expertise, identifying areas susceptible to critique.

I also disagree with the plaintiffs' interpretations of the second and third identified opinions. Rather than opining that brain plasticity has mitigated the effects of lead ingestion in the plaintiffs, Dr. D'Esposito opines that greater brain plasticity allows children generally to better mitigate the effects of brain injury than adults. Rather than opining that children are less susceptible to the harmful effects of lead ingestion than adults, Dr. D'Esposito opines that children are generally more resilient than adults when it comes to overcoming the effects of brain injury. These distinctions make the plaintiffs' arguments irrelevant, but they also raise the question of whether the opinions will be helpful to the jury in this case. Dr. D'Esposito's opinions regarding the increased ability, relative to adults, to mitigate the effects of a brain injury through brain plasticity are not directly relevant to issues of injury or cause in the case of these specific plaintiffs. However, plaintiffs' experts will testify that the childhood blood lead levels of the plaintiffs would have caused a decrement in IQ within a certain range. Dr. D'Esposito intends to rebut these opinions by arguing that specific blood lead levels in children can result in a range of injuries, or no injuries at all. His discussion of brain plasticity and the resilience of children's brains may help the jury by explaining the mechanism by which children exposed to similar amounts of lead suffer varying injuries over the long term. Accordingly, I will deny this motion.

I. Leanne Panizich

Leanne Panizich is a vocational rehabilitation expert retained by the defendants. Dr. Panizich proffers opinions that each plaintiff's earning potential is consistent with what one would expect given the plaintiffs' backgrounds and, therefore, there is no reason to suspect lead poisoning has had a negative impact on their earnings or vocational status.

Plaintiffs argue that Dr. Panizich is not qualified proffer opinions about the cause of plaintiffs' vocational status and that such testimony is irrelevant.

Plaintiffs first argue that Dr. Panizich is unqualified to determine whether lead was a factor in their vocational status because she has no background in lead or lead poisoning. They also argue that Dr. Panizich's methodology is unreliable, that it ignores the possible effects of lead poisoning, and that there are no peer reviewed publications establishing that the method is accurate or predictive.

Dr. Panizich used the PEEDS-RAPEL² methodology to develop her opinions. PEEDS-RAPEL is an "organized model for analyzing, synthesizing and displaying data as a basis to form reliable opinions" regarding lost earning capacity in cases where an individual suffers a pediatric injury. ECF no. 856 Ex. E p. 2. Any method of determining lost earning capacity is an attempt at comparing an individual's earning capacity before and after the identified injury. When the injury is suffered by a child, particularly when it is suffered before a child has begun formal education, there is very little data from which to estimate the individual's earning capacity before the injury. PEEDS-RAPEL addresses this dearth of direct evidence by approximating an individual's pre-injury earning capacity based on, among other factors, the occupations and educational attainment of the individual's immediate family. This approximation, although likely not exact, is based on the best evidence available of the individual's pre-injury earning capacity. It may be that the method is not particularly accurate, especially given the difficulty of addressing pre-

² The name PEEDS-RAPEL is a mnemonic for the categories of information considered by the method: Parental/Family Occupations, Educational Attainment, Evaluation Results, Developmental Stage, Synthesis, Rehabilitation Plan, Access to the Labor Market, Placeability, Earnings Capacity, and Labor Force Participation. ECF no. 856 Ex. E, p. 5.

injury earning capacity when the injury occurred in infancy, but it is more than mere speculation or conjecture, and is generally accepted within the relevant scientific community. Accordingly, I cannot conclude that Dr. Panizich's opinions lack sufficient reliability such that they should be excluded under Rule 702.

The fact that Dr. Panizich has no background in lead or lead poisoning does not disqualify her from offering opinions about the plaintiffs' lost earning capacities. Dr. Panizich does not, and was not asked to, offer opinions on the etiology of the plaintiffs' alleged cognitive impairments. Dr. Panizich has received a Masters of Science in Rehabilitation Counseling and a Ph.D. in psychology, and has worked as a vocational rehabilitation counselor. She is qualified to offer opinions on the plaintiffs' lost earning capacities.

Plaintiffs are incorrect that Dr. Panizich "ignores the effects of lead" in her report. Rather, she specifically considers scientific literature related to the effects of lead on IQ and its resulting effect on lost earnings. She then concludes that there is nonetheless no reason to conclude exposure to lead diminished the plaintiffs' earning capacities.

Despite plaintiffs' assertions to the contrary, there does appear to be peer-reviewed literature supporting the PEEDS-RAPEL method from within the last 15 years. Regardless, recent peer-reviewed literature is not required under the *Daubert* standard, and PEEDS-RAPEL is otherwise a reliable methodology.

Plaintiffs also argue that the opinions are not helpful to the jury because plaintiffs do not intend to offer evidence related to their lost earning capacities. Defendants argue, however, that the opinions are relevant to rebut anticipated testimony that plaintiffs' loss of IQ points results in fewer "opportunities and choices" which in turn make it harder to

get ahead, harder to get certain types of jobs, and harder to succeed. Defendants argue that references to “opportunities and choices” are, essentially, code for educational attainment and vocational success and that Dr. Panizich’s testimony is therefore relevant.

I do not agree that “opportunities and choices,” even when discussed in the context of “success” or “getting ahead,” is merely a stand-in for vocational success and earning capacity. A decrement in IQ can have myriad effects on an individual’s life extending far beyond earning capacity and what jobs may be attainable. The PEEDS-RAPEL method, meanwhile, is specifically a method for determining whether a pediatric injury resulted in lost earning capacity or vocational opportunities. Dr. Panizich makes clear in her reports that her opinions regard potential lost earnings and broad vocational categories. See, e.g., ECF no. 764 Ex. A 22. Although these opinions may be used to rebut testimony that plaintiffs’ vocational opportunities were limited or that their earnings capacity was diminished, the opinions do not address whether the plaintiffs’ exposure to lead resulted generally in fewer “opportunities and choices,” nor would the methodology be reliable to support such an opinion.

Finally, Plaintiffs argue that Dr. Panizich’s opinions are merely a backdoor effort to introduce unduly prejudicial evidence regarding the plaintiffs’ economic and social backgrounds. As discussed above, although Dr. Panizich does consider the plaintiffs’ social and economic backgrounds, as well as their family’s educational attainment and success, her opinions are the result of synthesis and analysis of these data as outlined by the PEEDS-RAPEL method. Although discussion of the plaintiffs’ economic, social, and ethnic backgrounds, as well as their family’s educational attainment, could be prejudicial, any potential prejudice is likely outweighed by the probative value of Dr.

Panizich's opinions. If plaintiffs have concerns with the manner in which Dr. Panizich discusses these issues, they are free to raise them in the form of objections at trial.

For the reasons above, plaintiffs' motion to exclude the testimony of Dr. Panizich is denied. However, there remains a possibility that Dr. Panizich's opinions will not prove relevant depending on what issues the plaintiffs choose to raise at trial.

J. Idit Trope

Idit Trope is a neuropsychologist retained by plaintiffs to offer diagnostic and causation opinions with respect to plaintiffs' neurocognitive injuries. Defendants move to exclude her diagnostic opinions related to brain damage, arguing that because she is not a medical doctor she is not qualified to diagnose brain damage. Defendants also move to exclude her opinions that plaintiffs have cognitive deficits, arguing that these opinions are based on an unreliable methodology. Finally, Defendants seek to exclude any testimony regarding anemia as Dr. Trope is not an expert on the subject.

Defendants argue that Dr. Trope, as a neuropsychologist rather than a physician or neurologist, is unqualified to diagnose brain damage. They cite to a non-binding case from the 4th Circuit that held the trial court properly excluded the testimony of a neuropsychologist who offered causation opinions when the witness was not a medical doctor. *Zellers v. NexTech Ne., LLC*, 533 F. App'x 192, 199 (4th Cir. 2013). They also cite to Dr. Trope's deposition and to a neuropsychology textbook to support that proposition that, in clinical settings, neuropsychologists do not make neurological diagnoses.

Other courts have found, however, that neuropsychologists are qualified to give testimony regarding brain injuries. See, e.g., *Bado-Santana v. Ford Motor Co.*, 482 F. Supp. 2d 192, 195-96 (D.P.R. 2007) (holding that a neuropsychologist was qualified to

render testimony on brain injuries despite being neither a physician nor a neurologist and noting “the American Psychological Association has stated . . . that neuropsychological testing is the only means of diagnosing some forms of brain damage.”) The Wisconsin Department of Health Services also appears to endorse neuropsychological screening specifically for the purpose of determining the effects of lead exposure.³ ECF no. 839-1 (Effects of Lead, Wisconsin Department of Health Services) p. 7. Additionally, the 4th Circuit case cited by the defendants is easily distinguishable: in that case, the neuropsychologist relied on the diagnosis of a physician for his opinion on the plaintiff’s brain injury, and that physician had since changed his diagnosis. *Zellers*, 533 F.App’x at 199. That is not the case here. The question remains simply whether Dr. Trope is qualified by knowledge, skill, experience, training, or education. I find that her training, education, and experience as a neuropsychologist qualify her to offer expert testimony on the existence and etiology of plaintiffs’ alleged brain injuries.

Defendants also argue that Dr. Trope’s proffered opinions that each of the plaintiffs suffer from neuropsychological impairments should be excluded because each is based on an unreliable methodology. Defendants concede that Dr. Trope is qualified to offer these opinions and take issue only with her methodology. Specifically, defendants argue that Dr. Trope’s methodology rests on two “baseless assumption”: (1) that, absent lead exposure, all plaintiffs would have performed within the average range on neuropsychological tests; and (2) that Dr. Trope is able to differentiate between deficits and other reasons for low scores.

³ Although Defendants claim that the Wisconsin Department of Health Services recommends neuropsychological screenings for children, while the plaintiffs are currently adults, they do not explain why a method effective for diagnosing children would be less effective in adults.

The main thrust of defendant's first argument is that Dr. Trope did not scientifically assess the pre-morbid IQ, meaning their IQ before the alleged injury, of the plaintiffs and instead simply assumed that, without the exposure to lead, the plaintiffs would have had average IQ. In these cases, where plaintiffs' alleged injuries occurred when they were toddlers, directly assessing pre-morbid IQ is impossible, and Dr. Trope admits as much. However, Dr. Trope did attempt to estimate the pre-morbid IQ of the plaintiffs from the information available. When asked if she simply presumed that the plaintiffs would have been in the average range, she replied, "you look – you do look at the environment. You look at what the potential would have been, the literature, and you know what happens to the brain of individuals with lead poisoning." ECF 822-1 p. 93. Although Dr. Trope made clear in her deposition that the "typical estimation would be that. . . you expect an individual to be average," such an estimation required considering "all available information." *Id.* Estimating pre-morbid cognitive functions when direct assessment is not possible is an approach validated by the literature. ECF 822-5 (Lezak) at 105 ("the first step in measuring cognitive deficit in an adult is to establish—or estimate, when direct information is not available—the patient's premorbid performance level.") Dr. Trope's methodology consists of more than simply assuming the plaintiffs would be, absent their lead exposure, average and is consistent with the approach laid out in the relevant literature. This is sufficient to survive *Daubert*.

Defendants' second argument is that Dr. Trope's methods are unreliable because Dr. Trope assumes she is able to differentiate between actual cognitive deficits and other reasons for low scores without any scientific analysis. I disagree. Dr. Trope made clear that she attributes low scores to cognitive deficits not on the basis of single scores, but

rather by examining the whole pattern of results. ECF 822-1 p. 44. In other words, Dr. Trope's method for determining whether low scores are caused by a brain injury is to examine which scores are below average and which are average or above and compare the pattern with the results one would expect from certain brain injuries. This method is consistent with the general practice of neuropsychology and is clearly more than simple *ipse dixit*. *Id.* at 45. I find the method is reliable under *Daubert*.

Finally, defendants argue that Dr. Trope's testimony regarding plaintiff McHenry's anemia should be barred because Dr. Trope is unqualified to diagnose anemia or its cause and is not an expert on the condition. I agree. Dr. Trope is not a physician and has no experience, training, or education related to anemia or other blood disorders. I will grant the motion in part as regards Dr. Trope's testimony on anemia. Otherwise, for the reasons detailed above, the motion is denied in part as regards the rest of Dr. Trope's testimony.

K. James Besunder

James Besunder is a pediatric critical care doctor at Akron Children's Hospital with significant professional experience treating patients with elevated lead levels. He opines that lead exposure is responsible for a drop in IQ in each of the plaintiffs. He bases his opinion primarily on epidemiological studies of the relationship between lead exposure and IQ combined with a review of each plaintiff's medical history. Defendants seek to exclude his testimony in its entirety.

Defendants first argue that Dr. Besunder's methodology is unreliable because he uses epidemiological studies, which explore disease patterns in large populations, to draw conclusions about individual plaintiffs. Defendants note that the studies relied on by Dr.

Besunder do not purport to allow causal inferences. However, as I explained during the *Burton* case, the method of applying epidemiological evidence to the medical records of individual patients is consistent with the practice of doctors and sufficient to withstand *Daubert*. *Burton v. American Cyanamid*, 362 F.Supp.3d 588, 599 (E.D. Wis. 2019). The epidemiological research Dr. Besunder relies on is nuanced about, e.g., the age of exposure to lead and other contributing factors, and Dr. Besunder uses this data along with medical histories to make individualized analyses tailored to each plaintiff. Defendants' concerns about the validity of the research Dr. Besunder draws on when used for this purpose may be addressed to the jury.

Defendants also argue that that Dr. Besunder's methodology is unreliable because he failed to conduct an adequate evaluation of plaintiffs' specific circumstances. Essentially, defendants take issue with the fact that Dr. Besunder's methods produce the same results when applied to children who have suffered the same blood lead levels at the same age, regardless of other factors that may have affected IQ such as home environment. This, they argue, means that Dr. Besunder has failed to make individualized analyses tailored to each child. I disagree. Dr. Besunder's method is an attempt to quantify IQ loss specifically caused by lead exposure. Such a method, if successful, would be expected to produce similar results for children with similar blood lead levels, regardless of other factors. Rather than failing to conduct an individualized evaluation of each plaintiffs, Dr. Besunder appears to have focused on the factors unique to each plaintiff that were most likely to have influenced IQ loss due to lead exposure, namely their blood lead levels at specific ages. This method is sufficiently reliable.

Defendants also argue that Dr. Besunder is not qualified to give the identified testimony because he is a treating physician and his experience treating children with elevated blood lead levels is unrelated to long-term assessments or IQ loss. As I did in the *Burton* case, and for the same reasons, I find that Dr. Besunder's professional training and his experience treating and counseling patients with elevated lead levels are sufficient to qualify him to give this testimony. *Burton v. Am. Cyanamid*, 362 F. Supp 3d 588, 588 (E.D. Wis. 2019).

Finally, defendants argue that Dr. Besunder's methods are unreliable because he failed to perform a differential etiology. Again, this is an issue I addressed in the first set of cases. *Id.* A differential etiology is not needed to support his opinion. His opinion, based on epidemiological evidence and the plaintiffs' exposure histories, is that lead alone caused a specific IQ drop, while other factors may have caused additional decrements to IQ. This is as opposed to starting with an already-established diagnosis of, for instance, a 10-point IQ drop and opining that lead is a substantial factor relative to other factors in causing that pre-identified drop. Further, I note that Dr. Besunder did consider other factors and acknowledge the existence of several co-contributing factors to plaintiffs' overall IQ drops.

For the reasons discussed above, I will deny this motion.

L. Historians

Several of the motions before me address the reliability or relevance of the opinions of expert historians retained by both sides, often arguing that an expert historian's sources were not sufficient to provide a reliable basis for their conclusion. Put another way, it is argued that their methodology was unreliable because there is no logical

connection between their sources and their conclusions. Reliability is “primarily a question of the validity of the methodology employed by an expert, not the quality of the data used in applying the methodology or the conclusions produced.” *Manpower, Inc. v. Insurance Co. of Pennsylvania*, 732 F.3d 796, 806 (7th Cir. 2013). The line between conclusions and methodology may not always be clear, but the critical inquiry is whether the data employed and opinion offered are connected by more than the *ipse dixit* of the expert. *Id.* (citing *General Electric Co. v. Joiner*, 522 U.S. 136, 146 (1997)). Proper historical work involves surveying the full array of available sources, evaluating the reliability of the sources, and thus “providing a basis for a ‘reliable narrative about the past.’” *Langbord v. United States Department of Treasury*, 832 F.3d 170, 195 (3rd Cir. 2016), quoting *United States v. Kantengwa*, 781 F.3d 545, 562 (1st Cir. 2015); also see Alvaro Hasani, *Putting History on the Stand: A Closer Look at the Legitimacy of Criticisms Levied Against Historians Who Testify As Expert Witnesses*, 34 Whittier L. Rev. 345, 354-55 (2013).

1. Coleen Dunlavy

Colleen Dunlavy, an expert historian retained by Sherwin-Williams, offers several opinions of which plaintiffs have moved to exclude the following ⁴:

- (1) Sherwin-Williams’ WLC pigments were not likely to have been used on the houses at issue. Surviving historical records indicate that the Milwaukee paint market was dominated by local manufacturers and that Sherwin-Williams had only slight penetration of the paint market through the 1950s. It never achieved a market position to rival that of local manufacturers. The Milwaukee market for

⁴ In a separate omnibus motion, plaintiffs seek to exclude a fourth opinion from Dr. Dunlavy. I will address that opinion, along with others from the omnibus motion, below.

WLC pigments, moreover, was dominated by the National Lead Company, and ample evidence indicates that many other companies also offered white lead for sale in Milwaukee. There is no evidence that Sherwin-Williams ever sold its lead to other manufacturers.

- (2) The available evidence indicates that Sherwin-Williams did not promote WLC pigments or the use of white lead-in-oil to the same degree that its competitors, such as National Lead, did.
- (3) Existing historical records indicate that Sherwin-Williams did not use WLC pigments in its interior architectural paint formulas (with very few exceptions). In its exterior architectural paint formulations, the company reduced its use of WLC pigments significantly as improved pigments such as its own zinc oxide (Ozlo) and titanium became available. By the late 1940s, the company had eliminated WLC from its exterior architectural paints (except for its mildew-resistant and undercoater formulations). The available evidence indicates that Sherwin-Williams affiliates generally used similar formulations.

Opinion 1 is not relevant to liability under the *Thomas* model. Under *Thomas*, a plaintiff may establish a prima facie case against a manufacturer by showing that the manufacturer produced or marketed WLC during the plaintiff's residence's existence. 285 Wis.2d 236 at ¶ 161. The burden then shifts to each defendant "to prove by a preponderance of the evidence that it *did not* produce or market white lead carbonate either during the relevant time period or in the geographical market where the house is located." *Id.* at ¶ 163 (emphasis added). Evidence that a particular defendant was *unlikely* to have caused a plaintiff's injury, or less likely than another to have caused plaintiff's

injury, is categorically different from evidence of exculpation recognized in these defenses. See *id.* at ¶ 153 (noting that the court’s concern in risk contribution cases is “with providing possibly innocent defendants a means to exculpate themselves by establishing their product *could not* have caused an injury”) (emphasis added). Also see *Collins v. Eli Lilly Co.*, 116 Wis.2d 166, 198 (1984) (“We believe that this procedure will result in a pool of defendants which it can reasonably be assume *could have* caused the plaintiffs injuries . . . This still could mean that some of the remaining defendants may be innocent, but we accept this as the price the defendants, and perhaps ultimately society, must pay to provide the plaintiff an adequate remedy under the law.”) (emphasis added). Evidence addressing the relative likelihood that one manufacturer or another caused the plaintiff’s harm is properly considered, however, in the context of the apportionment of damages. Indeed, the *Collins* court specifically identified market share as a factor that a jury might consider when apportioning liability “among the defendants that have been unable to exculpate themselves.” *Id.* at 200. Accordingly, this opinion will be barred from the first phase of the trial, which addresses liability, but admissible during the second phase, which addresses apportionment of damages.

Opinion 2, comparing the promotion of WLC carried out by Sherwin-Williams to that carried out by National Lead, is likewise relevant to the apportionment of damages, but is not relevant during the liability phase of the trial. For the same reasons evidence of relative market share is not relevant to liability under the *Thomas* framework, neither is relative participation in marketing.

Opinion 3, however, is relevant to the liability phase of the trial. I held previously in the *Burton* case that an exculpatory defense on the basis of chemical analysis of paint

taken from the residences at issue is cognizable within the *Thomas* framework. *Burton v. Am. Cyanamid*, 341 F.Supp 3d 933, 937-940 (E.D. Wis. 2018). This defense requires the defendant to identify the formulas for the paint products known to contain the defendant's WLC; these formulas are then compared against the chemical composition of the paint in the samples from the plaintiff's home. Dr. Dunlavy's report provides a historical basis to define the known universe of paint products containing Sherwin-Williams WLC, and is thus relevant to Sherwin-Williams' exculpatory defense.

Dr. Dunlavy's opinions are also reliable. Proper historical work involves surveying the full array of available sources, evaluating the reliability of the sources, and thus "providing a basis for a 'reliable narrative about the past.'" *Landbord*, 832 F.3d at 195. Dr. Dunlavy indicates in her disclosure that she "has employed accepted historical research methods" and based her opinions on a review of thousands of pages of various primary source documents, and I find that her conclusions are reasonably based on these data.

Plaintiffs argue that Dr. Dunlavy based Opinion 1 on "pure speculation" as there is no surviving information on market share, yet Dr. Dunlavy nonetheless purports to make a "quantitative determination of probability where no quantitative data exists."

I do not read Dr. Dunlavy's opinion as offering a quantitative determination of probability, but rather as inferring the likelihood of an event from relevant historical sources. Although it is true that there is no extant quantitative data, the section of Dr. Dunlavy's disclosure supporting Opinion 1 includes over 400 footnotes, each supporting a particular point, and many of the footnotes cite more than one supporting source. The sources cited include a diverse array of primary source documents and historical studies.

This is consistent with reliable historical methods, and Dr. Dunlavy may draw inferences from these sources regarding the market presence and use of Sherwin-Williams paints in Milwaukee.

Plaintiffs also argue that this opinion does not “fit” the issues in this case because there is “simply too great an analytical gap between the data and the opinion proffered.” *Caraker v. Sandoz Pharm. Corp.*, 188 F. Supp. 2d 1026, 1030 (S.D. Ill. 2001) (citing *General Elec. Co. v. Joiner*, 522 U.S. 136, 138 (1997)). Plaintiffs do not elaborate on this “analytical gap,” but assuming their argument relies on the assertion that Dr. Dunlavy’s opinion is quantitative in nature I once again disagree, and the argument fails.

Opinion 3 is also reliable. The thirty-three-page section of her disclosure supporting the opinion contains 293 footnotes citing to a wide variety of primary sources, and she consistently cites to multiple sources in support of each individual assertion. Plaintiffs’ argument is essentially that her opinion is unreliable because she reaches the same conclusion as another of Sherwin-Williams’ experts whose methodology plaintiffs assert was unreliable. This, however, is a critique of Dr. Dunlavy’s conclusions and not her methods; disagreements with an expert’s conclusions are not grounds for exclusion under *Daubert* and rule 702. *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 595 (1993) (“The focus, of course, must be solely on principles of methodology, not on the conclusions that they generate.”).

Accordingly, to the extent plaintiffs seek to bar Opinions 1 and 2 from the liability phase of the trial, their motion is granted in part. The motion is otherwise denied in part.

2. Michael Adamson

Michael Adamson, an expert historian retained by DuPont, offers several opinions regarding DuPont's market presence in Milwaukee. Plaintiffs argue that Dr. Adamson's opinions are unreliable because the sources upon which he relies are insufficient to support his conclusions. Plaintiffs do not question Dr. Adamson's qualifications, and concede that his sources are consistent with those of other experts in the field.

Plaintiffs first argue that Dr. Adamson's opinion that DuPont had only a small share in the Milwaukee market is unreliable because it is based primarily on the small number of DuPont advertisements in Milwaukee and there is no reliable basis to conclude that the number of advertisements correlates to relative market share. This is a critique of Dr. Adamson's conclusions and sources rather than his methodology, and is therefore properly addressed during cross-examination. Although the number of advertisements may not correlate precisely with a brand's market presence, there is a logical connection between the number of advertisement's and Dr. Adamson's opinion. Additionally, it is clear that Dr. Adamson relied on sources other than newspaper advertisements in forming his opinions, including contemporary consumer analyses, trade journals, catalogs, and contemporary DuPont documents. ECF no. 735 Ex. A 4-6. The inference Dr. Adamson drew from the analysis of these sources, that DuPont had only a small share of the Milwaukee market, is more than *ipse dixit* and is reliable.

Plaintiffs also argue that Dr. Adamson failed to review all relevant documents because he relied primarily on keyword searches of the Milwaukee Journal for the period after 1930, rather than examining both the Milwaukee Journal and the Milwaukee Sentinel. Generally, historians examine the full array of available sources, but I do not take this to mean they must examine each individual extant source they suspect is

relevant. Dr. Adamson addressed this exclusion, testifying that he confined his search to the Journal in this time period because he believed it was “pretty comprehensive for the period.” ECF no. 753 Ex. B 177:21. In other words, it seems Dr. Adamson believed he was examining a representative sample of the available sources, and the breadth the sources he consulted does not indicate that he was inappropriately limiting or cherry-picking his sources. Although plaintiffs’ critique does go to Dr. Adamson’s methodology, plaintiffs do not argue that his decision to limit some of the sources he examined is contrary to general historical practice. Nor am I inclined to exclude an expert historian merely because the opposing party is able to identify a source the historian chose not to examine.

Plaintiffs also argue that Dr. Adamson’s opinions regarding DuPont’s market share that are grounded in evidence of DuPont’s distribution networks have no reliable basis. Like the argument based on newspaper advertisements, this is a critique of Dr. Adamson’s sources and conclusions and also fails. There is a logical connection between distribution networks and market presence, and it is clear that Dr. Adamson consulted additional sources to form his opinions. *Id.* Plaintiffs argue that Dr. Adamson’s opinion that, based in part on the lack of distribution network, DuPont sold no white lead in oil in Milwaukee between 1917 and 1921 fails to account for the fact that Pritzlaff Hardware Company was a distributor for DuPont from 1921. However, Dr. Adamson does address this issue, opining that although Pritzlaff was a distributor they did not carry DuPont’s white lead in oil. ECF no. 735 Ex. A 15-16.

Finally, Plaintiffs argue that Dr. Adamson’s opinions based on consumer analyses actually support that there were sales of DuPont in Milwaukee at the relevant

time. Plaintiffs describe this as a “classic example of cherry-picking data.” ECF no. 734

8. It is not clear to me how this could be an example of cherry-picking data, especially given that Dr. Adamson does not deny that there were sales of DuPont in Milwaukee during the period considered. Plaintiffs are correct, however, that this evidence, regarding a small but still existent market share, is not relevant during the liability phase of the trial. It likely will be relevant to the apportionment of damages, however, and plaintiffs offer no reason to doubt the reliability of Dr. Adamson’s opinion.

For the preceding reasons, the motion to exclude in part the opinions of Michael Adamson is denied.

3. Jennifer Stevens

Dr. Stevens is an expert historian designated by Sherwin-Williams, ARCO, Armstrong, and DuPont to offer opinions regarding the dominance of National Lead in the WLC market. Plaintiffs argue her opinions are unreliable because she relies on national market data, rather than data from the Milwaukee market, because her opinions are in conflict with defendants’ other experts in the case, and because her opinion that most of the WLC National Lead marketed in Milwaukee was in the form of residential paint is based on insufficient evidence.

To begin, Dr. Stevens’ methods for inferring that National Lead was the dominant producer and marketer of WLC are reliable under Rule 702. Dr. Stevens surveyed the available and relevant sources, including but not limited to the national market share data. She also considered National Lead’s advertising efforts in Milwaukee, the proximity of its manufacturing plants to the Milwaukee market, its outreach to Milwaukee master painters, and the locations of warehouses, office, and the location of retail dealers in Milwaukee.

ECF no. 771, Ex. A 42-50. Plaintiffs complain that Dr. Stevens did not consider Milwaukee-specific market share data, but plaintiffs admit this data does not exist. Dr. Stevens concluded that the “historical documentation, taken as a whole, demonstrates that National Lead had a continual presence in Milwaukee from the early 1900s, and there is no reason to doubt that the company’s dominance in Milwaukee mirrored its dominance in the country as a whole.” *Id.* Despite plaintiffs’ complaints, there is no requirement in either *Thomas* or Rule 702 that Dr. Stevens be able to account for the entire market before opining on National Lead’s relative position in the market. Although some her sources do not provide direct evidence of National Lead’s market share in Milwaukee, Dr. Stevens seems to have identified the extant, relevant sources and made inferences from her analysis of these sources. This method is reliable. It may be, given the lack of sources related directly to the Milwaukee market, Dr. Steven’s opinion will carry little weight, and plaintiffs may make that argument during cross-examination, but the reliability of conclusions is ultimately a matter for the jury.

Plaintiffs also argue that Dr. Stevens’ opinions are inadmissible because they are in conflict with the opinions of Defendant’s other experts. Specifically, Dr. Stevens used national data to infer the local market position of National Lead but Dr. Adamson opines that DuPont’s national presence is not necessarily reflective of their local presence in Milwaukee. Plaintiffs do not identify why this would make Dr. Stevens’ opinions unreliable under *Daubert*. They identify no legal authority requiring experts to agree in order to be reliable, and in fact the Advisory Committee’s Notes to Rule 702 acknowledges that reliable experts may reach different conclusions. Fed.R.Evid. 702, advisory committee’s note (2000 amends.). To the extent plaintiffs are arguing that any conflict in these opinions

evinces a departure from acceptably methodology on the part of Dr. Stevens, their argument is unpersuasive. The positions of National Lead and DuPont relative to the Milwaukee market were different throughout the relative time period, in terms of both supply chains and products offered, and Dr. Stevens and Dr. Adamson considered these differences in deciding whether to infer how local presence related to the national data.

Finally, plaintiffs argue that Dr. Steven's opinion that most WLC National Lead promoted or marketed in Milwaukee was in the form of residential paint is not supported by sufficient data. Plaintiffs base this argument on the fact that Dr. Stevens testified in her deposition that she based her opinion on the "entire historical record" rather than citing to individual sources. However, the section of Dr. Stevens' report addressing this opinion makes numerous citations to specific, individual sources. The fact that Dr. Stevens could not recall each source in her deposition does not reflect on the reliability of her opinions. Nor is she required, as plaintiffs suggest, to be able to quantify the amount of WLC sold as residential paint for her opinions to be reliable.

I will note that Dr. Stevens' opinions are not relevant to the liability of the defendants and are therefore not admissible in the first phase of the trial. However, they may be relevant to the apportionment of damages and admissible during the second phase of the trial. This motion is denied.

4. Bob Reinhardt

Bob Reinhardt is an expert historian retained by Armstrong, DuPont, and Sherwin-Williams to render opinions regarding the historical knowledge of health risks of lead, in particular lead-based paint. Plaintiffs argue that Dr. Reinhardt's opinions regarding what

the general public knew about the dangers of lead paint should be excluded as they are based on speculation.

Plaintiffs concede that Dr. Reinhardt applied proper historical methodology in order to form his opinions about what American health professionals knew about the dangers of lead at various times. However, they argue Dr. Reinhardt did not use a similarly reliable methodology to form his opinions about what the general public, and other groups within the general public such as homeowners or mothers, knew about the dangers of lead paint. In his research, Dr. Reinhardt reviewed articles in a number of newspapers and magazines regarding the dangers of lead, but this is insufficient to opine about what the general public knew, plaintiffs argue, because he did not consider, for example, public opinion polls, the demographics of readers of the publications, or the geographical location of subscribers.

Dr. Reinhardt considered a number of sources in forming his opinions, including published columns from physicians warning of the risks of lead-based consumer products in a number of newspapers and magazines during the relevant time period. ECF no. 844 Ex. B 3-4. Plaintiffs' argue that Dr. Reinhardt's sources are insufficient to opine on what the general public knew. However, Dr. Reinhardt's report indicates his opinions concern the availability of information, rather than what the general public actually knew. See, e.g., ECF no. 844 Ex. A 19-20. I find the articles reviewed by Dr. Reinhardt from various publications that circulated in Wisconsin are sufficient data upon which to form opinions regarding the availability of information. Accordingly, this motion is denied.

5. Defendants' Historians' Testimony Regarding National Lead and Eagle-Picher

Plaintiffs move to exclude testimony from Dr. Jennifer Stevens, Dr. Colleen Dunlavy, and Dr. Michael Adamson regarding settled defendant National Lead and non-party Eagle-Picher. Plaintiffs argue that, for a number of reasons, the offered opinions are irrelevant in the second phase of the trial.

If some or all of the defendants are found liable in the first phase of the trial, the second phase would focus on two issues: (1) whether the remaining defendants can make a prima facie case against any other party they contend should be in the pool; and (2) apportionment of damages among defendants in the pool. *Collins v. Eli Lilly Co.* identifies a non-exhaustive list of factors that may be considered when apportioning damage under the risk-contribution framework. 116 Wis.2d 166, 200 (Wis. 1984). The identified factors relevant here are: (1) whether any defendant had a large or small market share in the relevant area; (2) whether any defendant took the lead or merely followed the lead of others in producing or marketing WLC; (3) whether any defendant issued warnings about the dangers of WLC; and (4) whether any defendant took any affirmative steps to reduce the risk of injury to the public. *Id.* I may, in my discretion, permit the jury to consider other factors relevant to apportioning liability.

Dr. Stevens is an expert historian designated by Sherwin-Williams, ARCO, Armstrong, and DuPont to offer opinions on the dominance of National Lead in the WLC market. Plaintiffs argue her opinions are either not relevant or not reliable because she cannot offer a reliable opinion as to the percentage of WLC made, promoted, or sold by National Lead in Milwaukee, which plaintiffs contend is the only relevant market. Because there is no Milwaukee specific sales data, Dr. Stevens relies on the national data alone, they argue, to unreliably opine that the Milwaukee Market reflected the national market.

Finally, plaintiffs argue that even if Dr. Stevens had Milwaukee sales data for National Lead, such data would be an unreliable basis on which to opine National Lead was “dominant” unless Dr. Stevens also had data reflecting the market shares of every other participant in the market.

Dr. Stevens’ methods for inferring that National Lead was the dominant producer and marketer of WLC are reliable under Rule 702 for the reasons discussed in section III.B.3 of this order. Dr. Stevens may infer from the available sources that National Lead was dominant in the market without quantitative data on either its or its competitors’ market shares.

That leaves the question of whether Dr. Steven’s opinions would be helpful for the jury. Although evidence regarding National Lead is not relevant to any issue in the first phase of the trial, Dr. Steven’s opinion on National Lead’s dominant market presence is clearly relevant, and therefore helpful to the jury, in the second phase of the trial. Whether any defendant had a large or small market share is a relevant factor under *Thomas*, and the opinion that National Lead was dominant in the Milwaukee area is relevant not only to the size of National Lead’s market share but also to whether any defendants “took the lead or merely followed others” in producing and marketing WLC. *See Thomas*, 285 Wis. at ¶109. Accordingly, I will deny this motion as regards the opinions of Dr. Stevens.

Coleen Dunlavy is an expert historian retained by Sherwin-Williams and expected to testify that National Lead was an “aggressive promoter as well as the predominant producer and supplier of white lead pigments” from the late 19th Century until the 1950s and that both National Lead and Eagle-Picher had dominant presences

both in the national and Milwaukee markets. Plaintiffs argue that Dr. Dunlavy's opinions are irrelevant because (1) Dr. Dunlavy did not determine whether National Lead manufactured the type of WLC product that poisoned the plaintiffs; (2) Dr. Dunlavy offers opinions about market share in Milwaukee despite a lack of market data for the area; and (3) Dr. Dunlavy admitted on the record that she cannot assign a particular percentage of responsibility to any party.

Regarding the plaintiffs' first argument, it is true that Dr. Dunlavy does not intend to testify as to the type of WLC produced by National Lead. However, defendants indicate that they intend to rely on other evidence in the record that National Lead used the type of WLC that poisoned the plaintiffs.

Regarding plaintiffs' second argument, for the reasons discussed in section II.B.3 of this order, Dr. Dunlavy may make inferences about market share in Milwaukee so long as she relies on reliable historical methods. As discussed in section III.B.1 of this order, Dr. Dunlavy's methods are reliable under Rule 702. To the extent plaintiffs take issue with the relevance of Dr. Dunlavy's opinions, opinions regarding the relative market share of producers and marketers of WLC in Milwaukee is clearly relevant to allocation of damages under the risk-contribution framework. *See Thomas*, 2005 WI at ¶ 109.

Regarding plaintiffs' third argument, Dr. Dunlavy is not required to opine as to the particular percentage of responsibility any party bears. Rather, her opinions must be helpful to the jury in their attempt to determine relative responsibility. I find that Dr. Dunlavy's opinions about National Lead's market share in Milwaukee will be helpful to

the jury in allocating damages in the second phase of the trial. Accordingly, I will deny this motion as regards the opinions of Dr. Dunlavy.

Michael Adamson is an expert historian retained by DuPont and expected to offer opinions regarding the market presence of DuPont and National Lead in Milwaukee. Plaintiffs argue that Dr. Adamson's opinions regarding National Lead are irrelevant because Dr. Adamson stated during a deposition that his opinion "does not attempt a market share analysis for National Lead."

Dr. Adamson's statement during his deposition was in response to the question, "you're not attempting to assign a percentage of responsibility to National Lead for its role in damaging the plaintiffs in this case, are you?" Dr. Adamson's comments, and the content of his report, indicates that he focused on determining whether certain NL products were present in the Milwaukee market and through which dealers and distributors they were sold. Plaintiffs argue that since defendants are not required to show NL was present in the Milwaukee market to make their prima facie case, and because Dr. Adamson testified he did not attempt a market share analysis, his testimony about NL is irrelevant during either phase of the trial. I agree that the testimony is irrelevant during the first phase of the trial, but it likely will be relevant during the second. Although Dr. Adamson did not attempt to determine the exact market share of National Lead in Milwaukee, his testimony may nonetheless be helpful to the jury in allocating damages. Dr. Adamson's report describes the extent to which certain NL brands were promoted and distributed in the Milwaukee market throughout the relevant time period. ECF no. 771 Ex. E 51-55. Although he does not quantitatively describe National Lead's market share, his opinion is relevant to whether National Lead

had a large or small market share as well as whether they took the lead or merely followed in the production and marketing of WLC. Accordingly, I will deny this motion as regards the opinions of Dr. Adamson.

IV. CONCLUSION

THEREFORE IT IS ORDERED that the motions in no. 11-CV-0055 at ECF nos. 734, 736, 739, 741, 754, 755, 757, 763, 770, 775, 779, 790, 893, 926 are **DENIED**.

IT IS FURTHER ORDERED that the motions in no. 14-CV-1423 at ECF nos. 505, 507, 512, 517, 520, 523, 524, 525, 533, 537, 514, 546, 653, 678 are **DENIED**.

IT IS FURTHER ORDERED that the motions in no. 11-CV-0055 at ECF nos. 752, 892, and 908 are **GRANTED**.

IT IS FURTHER ORDERED that the motions in no. 14-CV-1423 at ECF nos. 511, 652, and 662 are **GRANTED**

IT IS FURTHER ORDERED that the motions in no. 11-CV-0055 at ECF nos. 732 and 821 are **GRANTED IN PART** and **DENIED IN PART** as explained above.

IT IS FURTHER ORDERED that the motions in no. 14-CV-1423 at ECF nos. 503 and 581 are **GRANTED IN PART** and **DENIED IN PART** as explained above.

Dated in Milwaukee, Wisconsin, this 22nd day of March, 2021.

s/Lynn Adelman
LYNN ADELMAN
United States District Judge